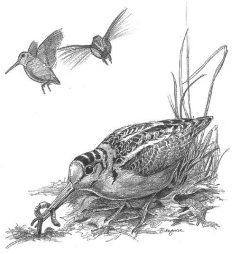

American Woodcock Management

Managing for worms

The American woodcock (*Philohela minor*), also known as the timberdoodle or bog-borer, is a popular game bird in the eastern United States. It is of interest to non-hunters, such as bird watchers, for its peculiar mating and foraging behaviors. Southern forests harbor both resident and migrant woodcock. They are birds of streamside (riparian) thickets and bottomlands where dense cover provides shade and protection. These bottomlands contain abundant food and dense thickets make excellent winter cover. Woodcock frequent pasture lands in evening and early morning hours. Acceptable breeding habitat occurs from the Upper Coastal Plains to the highest mountain top balds wherever the soil is moist and cover dense. The birds can use overwintering habitat if the ground is neither covered with snow or frozen. Land drainage, impoundments, conversion of bottomland forests to cropland, and urban expansion are the threats to woodcock habitat. Insecticides may contribute to bird loss because of effects on the food chain.

Life Cycle

Woodcock return to the northeast from their southern wintering grounds typically sometime in March. Breeding males establish a "singing ground" which they defend against other males, often in the same area year after year. Singing grounds are small clearings or very young stands of seedlings, and can be as small as a half-acre or as large as 100 acres. Every night, from March through May, the optimistic male puts on an aerial ballet, which is unmatched by any other bird in North America. The best time to hear and see the display is between sundown and full darkness.

Listen first for a buzzing, insect sound, an unusual noise, which biologists call a "peent." When the peents grow more rapid in succession, the male is ready to fly. The instant the peents stop, he will take to the air in a spiral ascent that grows wider and wider until he reaches heights of about 300 feet. If you miss him rising, listen for a chirping sound from high above, then a twittering--the sound of wind rushing through their wing feathers as the woodcock falls to earth.

A nearby female chooses a male to mate with. Hens build a shallow nest area in this same area of young-growth forest. Similar to snipe and certain other shorebirds, woodcock lay four eggs, which will hatch in about 20 days. As far as researchers know, woodcock raise only one brood per year. Each year brood sizes are fairly constant at about four chicks per successful nesting hen. However, chicks are lost each year between the early brooding season in spring and the hunting season in fall. In the event a predator destroys their eggs, hens will usually re-nest. The young are capable of foraging for themselves when only a few hours old. Within a few weeks, they begin to fly.

A management plan for woodcock on your farm or woodlot should take into account aspects of the bird's feeding, nesting, and breeding behavior, as well as its movement and migratory patterns. A good working knowledge of the life history and habitat preferences of the woodcock will be very useful in instituting a plan to increase woodcock populations. Some information can be obtained from bird field guides.

Woodcocks are very dependent upon certain types and successional stages of vegetation for their various needs. Old fields and clearings provide singing and roosting grounds, dense stands of young hardwoods on moist, fertile soil provide cover for feeding in these areas. A large part of a woodcock management plan will be in controlling the size and density of vegetation. Cutting or burning forest tracts, grazing, and planting are all possibly useful vegetation management techniques. This is a bird of wet early forests with dense vegetation. When forests "grow up" the bird leaves.

The following is a list of management options for woodcock involving habitats, populations, people management, as well as other useful ideas for wildlife management (woodcock mostly) for the private landowner. All of these ideas will not apply for every area or situation. You should be very selective in choosing appropriate techniques or options for your particular area. You should determine your objectives first, whether they are aesthetic, economic, or both, then decide which options will most efficiently bring the desired results.

1. Protect wetlands (if there are any on your property). These areas are very important to woodcock because they provide ideal feeding grounds. When wetlands are drained, the ground becomes too hard for these birds to probe for worms, making feeding difficult.
2. Maintain areas of crops. Even small amounts of croplands are useful, especially as roost sites. Blueberry fields make excellent woodcock roosting and courting areas, and are also a profitable cash crop.
3. If small scale timber production is desired, then relatively short cutting rotations (approximately 40 years, but it depends on the type of trees) should be practiced. This not only can provide economic returns, but provides temporary singing grounds, and rejuvenates brood and nesting cover. It is best to remove or burn the slash from clearcuts to enhance these newly created openings for woodcock nesting, courting, and roosting. Encourage aspen clumps.
4. Maintain open grassy areas near water sources. These are prime nesting and courting grounds because of the water source and the food which is accessible here. These areas can be maintained by burning or mowing.
5. Maintain all water sources on your property. Springs, seeps, and other wet areas are a vital part of good woodcock habitat.
6. Be aware of activities and land use changes (future plans as well) on the lands adjacent to your property. Your management plan can be structured to take advantage of your neighbors' land and its future uses. With this approach, you can maximize the benefits for woodcock from your area by managing it for the habitat type which is in short supply, based on what your neighbors' land will provide.

7. Plant native shrubs around the perimeter of the maintained fields which were mentioned earlier. These will provide roosting and escape cover for woodcock as well as for other wildlife. Keep vegetation height to a maximum of 20 feet.
8. Plant shrubs around ponds, along streams, and in wet bottom lands or marshes. Often these locations are suitable habitat for woodcock as far as soil fertility and earthworm production are concerned, but lack adequate cover. Planting will make these areas much more attractive to woodcock. The following is a list of shrubs which would be appropriate:

   alder, hawthorns, gray dogwood, spicebush, silky dogwood, black haw, dentate viburnum

9. The shrub most often recommended of the previously mentioned plants is the alder. Alder can be intensely managed to provide varied types of habitat for woodcock. Clearings should be cut across (perpendicular to) streams or other water sources. This provides a moisture gradient along which different vegetation types and sizes will grow. In the case of alder, those plants growing nearest the stream will grow faster and in denser stands. These areas will retain moist soils in the summer, providing earthworm feeding areas and dense cover when other areas are dry. Drier portions of the strip will have slower alder growth, therefore retaining open singing grounds longer. Clean livestock manure can be dumped in moist areas to encourage earthworms for the birds.
10. Monitor the areas of alder on your property for age and growth form. As alder gets older, it will tend to grow more horizontal and be found in thinner stands. These stands are less attractive to woodcocks, which prefer thick, upright clumps of thinner stem alder plants. Cutting or burning of the older alder stands will rejuvenate these areas for woodcock cover.
11. Another method of regenerating alder or other plant cover is by using herbicides. This approach is much less labor intensive than cutting or burning and has little effect on earthworm populations. A recommended approach is using a backpack sprayer. Two applications on calm, cool days over a 2 week period when the leaves have reached full size should bring the best results.
12. Monitor the numbers of woodcock predators such as hawks and owls in the open areas. Predation can be reduced by minimizing perches for these birds in and around fields where woodcocks are nesting and courting.
13. Control grazing of livestock on your property. Grazing can be beneficial for maintaining early successional stages, but excessive grazing will destroy bottomland habitats. A general measure of proper grazing intensity is not more than 30 grazing days per acre. A grazing day is defined as one head of cattle per acre per day. (For example, a 15-acre tract could be grazed by 15 cattle for one month.)
14. Reduce use of insecticides in possible woodcock habitat.

A contribution of Steve Boothe (1991) and Kenny Parker (1992)
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